

Remarks

Applicants acknowledge receipt of the Office Action mailed April 14, 2009 in connection with the above-identified application.

Applicants have cancelled claims 27, 29, and 43 without prejudice. With this amendment, claims 25-26, 32-33, 37, 39-40, 42, 45, 48-49, 53, and 55-56 are pending and under consideration. Claims 28, 30-31, 34-36, 38, 41, 44, 46-47, 50-52, 54, 57-59 have been withdrawn from consideration.

Applicants have amended claims 26, 32-33, 37, 45, 48-49, and 53 to use more conventional U.S. claim terminology. Independent claims 25 and 42 have been amended to more particularly point out the order in which the recited steps are carried out, and to address the claim objections raised by the Examiner at page 3 of the Office Action. Claims 39-40 and 55-56 have been amended to recite more conventional U.S. claim language and to address some of the Examiner's rejections under 35 U.S.C. § 112 by deleting some of the language. No new matter has been added.

Rejections Under 35 U.S.C. § 112

The Examiner has rejected claims 39-40 and 55-56 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Examiner that the following agents were not adequately described within the meaning of § 112, first paragraph: function enhancing components, otherwise modified growth promoters, biocompatibilisers, human and animal health products, functioning matter, and products intended for growth or repair or modeling of the skeleton, organs, dental

structure. Applicants traverse this rejection because one of ordinary skill the art would understand that applicants had the claimed invention in their possession as of the time of filing. Nevertheless, in order to advance prosecution, applicants have deleted the terms objected to by the Examiner in claims 39-40 and 55-56. These amendments obviate the written description rejections, and applicant respectfully requests their withdrawal.

The Examiner has also rejected claims 25, 27, 29, 40, 42, and 56 under 35 U.S.C. § 112, second paragraph as allegedly failing to particularly point out and distinctly claim the subject matter recited in those claims. Without conceding the propriety of the rejection, and in an effort to advance prosecution, applicants have made the following amendments which obviate the rejections:

- the language objected to in claim 25 has been deleted;
- claims 27, 29 and 43 have been cancelled;
- the phrases “such as” and “and the like” have been deleted from claims 40 and 56.

With these amendments, applicants submit that the claims are in full compliance with the requirements of the 35 U.S.C. § 112.

Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 25, 27, 29, 32-33, and 39-40 under 35 U.S.C. § 103(a) as allegedly unpatentable over Perman, et al., U.S. Patent No. 5,340,614 (Perman”). Applicants respectfully traverse this rejection.

The presently claimed process involves the steps of:

- (a) providing a deposit of deposition matter at the surface, or fluid phase deposition of discrete particles, or dissolved deposition matter

by immersion or spraying of solid state polymer substrate with a solution, dispersion or suspension of deposition matter;

(b) drying by freezing, evaporation, heating or blotting;

(c) contacting the surface deposited polymer with a plasticizing fluid or a mixture of plasticizing fluids under plasticizing conditions to plasticize and/or swell the polymer and internally distribute deposition matter; and

(d) releasing the plasticizing fluid or fluids to obtain polymer composite.

The amendments to claim 25 more particularly point out the order in which the steps specified in the claim are carried out. In the claimed process, contacting the surface-deposited polymer with plasticizing fluid occurs after the deposition and drying steps. Therefore, the process of claim 25 includes the contacting of a dry (i.e. solvent-free) mixture of polymer substrate and deposition matter with a supercritical fluid. By contrast, Perman's process requires that its "impregnation additives" and the "carrier liquid" be contacted simultaneously with the polymer substrate (col. 2, lines 28-39) .

Nothing in Perman teaches or suggests the process as specifically claimed in the present application (i.e. drying the substrate after the deposition step and prior to the contact with the plasticizing fluid). Accordingly, applicants respectfully submit that the rejection of independent claims 25 and 42 over Perman should be reconsidered and withdrawn. Similarly, the rejections of dependent claims 27, 29, 32-33, and 39-40 should also be withdrawn.

Claims 25-26, 42-43, 45, 48-49, 53, and 55-56 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Perman in view of Colombo, et al., U.S. Patent No. 6,913,779 ("Colombo"). Applicants traverse.

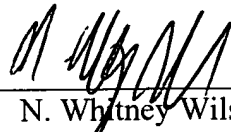
The deficiencies of Perman were discussed above; namely that Perman fails to disclose a process in which drying the substrate after the deposition step occurs prior to the contact with the plasticizing fluid. Colombo does not cure this deficiency (see, e.g. col. 3, lines 42-49). Accordingly, the § 103 rejections over Perman in view of Colombo should be withdrawn.

Conclusion

In light of the foregoing Amendments and Remarks, Applicants respectfully request that the outstanding rejections be withdrawn. It is believed that the present application is in condition for allowance, and prompt notice to that effect is earnestly solicited. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, she is invited to telephone the undersigned at the number provided.

Respectfully submitted,
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